

REMARKS/ARGUMENTS

No new matter has been added.

The Office Action mailed July 19, 2006, has been received and reviewed. Claims 1-44 are currently pending in the application. Claims 25-31, 33-34, and 37-44 have been withdrawn from consideration as being drawn to non-elected invention(s). Claims 1-24, 32, 35, and 36 stand rejected. Applicants have amended claims 7 and 14, and respectfully request reconsideration of the application as amended herein.

35 U.S.C. § 102(e) Anticipation Rejections

Anticipation Rejection Based on PCT Patent Publication No. WO 01/63960 to Raith

Claims 1-3, 7-11, 14-19, 23, 32, 35, and 36 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Raith (PCT Patent Publication No. WO 01/63960). Applicants respectfully traverse this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The 35 U.S.C. § 102(b) anticipation rejections of claims 1-3, 7-11, 14-19, 23, 32, 35, and 36 are improper because the Raith reference does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claims.

Claims 1, 2-3

Applicants submit that the Raith reference does not and cannot anticipate under 35 U.S.C. § 102 the presently claimed invention of independent claim 1, and claims 2-3 depending therefrom, because the Raith reference does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claims.

The Office Action alleges:

Regarding claim 1, Raith discloses a wireless communication system comprising: a first transceiver in (12, fig. 1), a second transceiver in (12, fig. 1), a third transceiver in

(20, fig. 1) in communication with the first transceiver, and a controller (not shown) configured to effectuate a soft handoff from the first transceiver to the second transceiver using a set of optimum parameters (reads on soft handoff branches) that are determined based on a current position of the third transceiver (20, fig. 1, page 3, line 1-page 4, line 4; figs. 1-2). (Office Action, p. 2).

Applicants respectfully disagree that the Raith reference anticipates Applicants' invention as claimed in independent claim 1 which reads:

1. A wireless communication system comprising:
a first transceiver;
a second transceiver;
a third transceiver in communication with the first transceiver; and
a ***controller configured to effectuate a soft handoff*** from the first transceiver to the second transceiver using a set of optimum parameters that are determined ***based on a current position of the third transceiver.*** (Emphasis added.)

In contrast, the Raith reference discloses a handoff technique commonly referred to as a "hard handoff" wherein a mobile terminal is connected to only one base station at a time and therefore needs to drop the radio link for a brief period of time before being connected to a different, stronger transmitter. Such a handoff technique is in distinct contradiction to a "soft handoff" technique, as claimed by Applicants, wherein a mobile terminal adds a new sufficiently-strong sector to its active set. It is so called because the radio link with the previous sector(s) is not broken before a link is established with a new sector; this soft handoff is described as "make before break" handoff. Specifically, the Raith reference discloses:

From the list of available channels, the mobile communication network selects the cell which can best serve the mobile terminal and minimize interference. A suitable traffic channel in that cell is assigned as the target, and ***the mobile terminal is commanded to retune to the traffic channel in the target cell. At the same time, The call is switched by the IVISC from the base station currently serving the mobile terminal to the base station in the target cell. The mobile terminal tunes to the newly assigned channel*** during one of the idle periods so there, is no interruption in transmission. (Raith, p. 3, lines 11-19; emphasis added.)

While the Raith reference discloses "if the mobile communication network was provided with the location of the mobile terminal, the mobile communication network could use this

information for a variety of purposes, such as to optimize handovers”, the handoff considerations and procedures for soft handoffs, as claimed by Applicants, and hard handoffs, as disclosed by the Raith reference, are radically different and independent. (Raith, p. 4, lines 1-4).

Clearly, the Raith reference discloses use of location data for performing hard handoffs, however, the Raith reference does not describe, either expressly or inherently, Applicants’ identical inventions in as complete detail as are contained in the claims. Specifically, the Raith reference does not describe in as complete detail “a *controller configured to effectuate a soft handoff* from the first transceiver to the second transceiver using a set of optimum parameters that are determined *based on a current position of the third transceiver*”, as claimed by Applicants in independent claim 1 from which claims 2-3 depend. Therefore, the Raith reference **cannot** anticipate, under 35 U.S.C. §102, Applicants’ invention as presently claimed.

Therefore, independent claim 1, and claims 2-3 depending therefrom, are not anticipated by the Raith reference under 35 U.S.C. § 102. Accordingly, such claims are allowable over the cited prior art and Applicants respectfully request that such rejections be withdrawn.

Claim 7

Applicants submit that the Raith reference does not and cannot anticipate under 35 U.S.C. § 102 the presently claimed invention of independent claim 7 because the Raith reference does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claim.

The Office Action alleges:

Regarding claim 7, Raith discloses a mobile unit comprising: a receiver in (12, fig. 1) configured to receive set of optimum system access parameters determined on a current position of the mobile unit (this is implied as the reference teaches using position of mobile communicat[ion] device to optimize handovers), a controller (not shown) configured to control mobile unit based on the received set of optimum system access-parameters (20, fig. 1, page 3, line 1-page 4, line 4; figs. 1-2). (Office Action, p. 2).

Applicants respectfully disagree that the Raith reference anticipates Applicants’ invention as claimed in independent claim 7 which reads:

7. A mobile unit comprising:
a *receiver unit configured to receive* a set of optimum system-access *parameters determined based on a current position of the mobile unit*; and
a *controller configured to effectuate a soft handoff* of the mobile unit *based on the* received set of optimum system-access *parameters*. (Emphasis added.)

Applicants herein sustain the above-proffered arguments relating to the specific disclosure of the Raith reference. As stated above and in contrast to Applicants' invention as claimed, the Raith reference discloses a handoff technique commonly referred to as a "hard handoff". Such a handoff technique is in distinct contradiction to a "soft handoff" technique, as claimed by Applicants.

While the Raith reference discloses "if the mobile communication network was provided with the location of the mobile terminal, the mobile communication network could use this information for a variety of purposes, such as to optimize handovers", the handoff considerations and procedures for soft handoffs, as claimed by Applicants, and hard handoffs, as disclosed by the Raith reference, are radically different and independent. (Raith, p. 4, lines 1-4).

Clearly, the Raith reference discloses use of location data for performing hard handoffs, however, the Raith reference does not describe, either expressly or inherently, Applicants' identical inventions in as complete detail as are contained in the claims. Specifically, the Raith reference does not describe in as complete detail "a *receiver unit configured to receive* a set of optimum system-access *parameters determined based on a current position of the mobile unit*; and a *controller configured to effectuate a soft handoff* of the mobile unit *based on the* received set of optimum system-access *parameters*", as claimed by Applicants in independent claim 7. Therefore, the Raith reference **cannot** anticipate, under 35 U.S.C. §102, Applicants' invention as presently claimed.

Therefore, independent claim 7 is not anticipated by the Raith reference under 35 U.S.C. § 102. Accordingly, such claim is allowable over the cited prior art and Applicants respectfully request that such rejection be withdrawn.

Claims 8-11

Applicants submit that the Raith reference does not and cannot anticipate under 35 U.S.C. § 102 the presently claimed invention of independent claim 8 and claims 9-11 depending

therefrom because the Raith reference does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claims.

The Office Action alleges:

Regarding claim 8, Raith discloses a mobile unit comprising: a receiver in (20, fig. 1) configured to receive set of optimum system access parameters determined in a current position of the mobile unit (this is implied as the reference teaches using position of mobile communicat[ion] device to optimize handovers), a controller (not shown) to effectuate a soft handoff from first base station (12, fig. 1) to a second base station (like 12, fig. 1) based on the received set of optimum soft-handoff parameters (20, fig. 1, page 3, line 1-page 4, line 4; figs. 1-2). (Office Action, p. 3).

Applicants respectfully disagree that the Raith reference anticipates Applicants' invention as claimed in independent claim 8 which reads:

8. A mobile unit comprising:
a *receiver unit configured to receive* a set of optimum *soft-handoff parameters determined based on a current position of the mobile unit*; and
a *controller configured to effectuate a soft handoff* from a first base station to a second base station *based on the* received set of optimum *soft-handoff parameters*. (Emphasis added.)

Applicants herein sustain the above-proffered arguments relating to the specific disclosure of the Raith reference. As stated above and in contrast to Applicants' invention as claimed, the Raith reference discloses a handoff technique commonly referred to as a "hard handoff". Such a handoff technique is in distinct contradiction to a "soft handoff" technique, as claimed by Applicants.

While the Raith reference discloses "if the mobile communication network was provided with the location of the mobile terminal, the mobile communication network could use this information for a variety of purposes, such as to optimize handovers", the handoff considerations and procedures for soft handoffs, as claimed by Applicants, and hard handoffs, as disclosed by the Raith reference, are radically different and independent. (Raith, p. 4, lines 1-4).

Clearly, the Raith reference discloses use of location data for performing hard handoffs, however, the Raith reference does not describe, either expressly or inherently, Applicants' identical inventions in as complete detail as are contained in the claims. Specifically, the Raith reference does not describe in as complete detail "a *receiver unit configured to receive* a set of

optimum *soft-handoff parameters determined based on a current position of the mobile unit*, and a *controller configured to effectuate a soft handoff* from a first base station to a second base station *based on the* received set of optimum *soft-handoff parameters*”, as claimed by Applicants in independent claim 8 from which claims 9-11 depend. Therefore, the Raith reference **cannot** anticipate, under 35 U.S.C. §102, Applicants’ invention as presently claimed.

Therefore, independent claim 8 and claims 9-11 depending therefrom are not anticipated by the Raith reference under 35 U.S.C. § 102. Accordingly, such claims are allowable over the cited prior art and Applicants respectfully request that such rejections be withdrawn.

Claim 14

Applicants submit that the Raith reference does not and cannot anticipate under 35 U.S.C. § 102 the presently claimed invention of independent claim 14 because the Raith reference does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claim.

The Office Action alleges:

Regarding claim 14, Raith discloses a base station comprising: a transmitter unit (12, fig. 1) configured to transmit set of optimum system-access parameters determined based on the current position of mobile unit (20, fig. 1), and a controller in (12, fig. 1) configured to control the mobile unit based on the set of optimum system access parameters (page 7 lines 19-24; page 3 lines 3-20; page 8, lines 2-4, lines 14-15; page 9 lines 1-21). (Office Action, p. 3).

Applicants respectfully disagree that the Raith reference anticipates Applicants’ invention as claimed in independent claim 14 which reads:

14. A base station comprising:
a *transmitter unit configured to transmit* a set of optimum system-access *parameters determined based on a current position of a mobile unit*; and
a *controller configured to effectuate a soft handoff* of the mobile unit *based on the* set of optimum system-access *parameters*. (Emphasis added.)

Applicants herein sustain the above-proffered arguments relating to the specific disclosure of the Raith reference. As stated above and in contrast to Applicants’ invention as claimed, the Raith reference discloses a handoff technique commonly referred to as a “hard handoff”. Such a handoff

technique is in distinct contradiction to a “soft handoff” technique, as claimed by Applicants.

While the Raith reference discloses “if the mobile communication network was provided with the location of the mobile terminal, the mobile communication network could use this information for a variety of purposes, such as to optimize handovers”, the handoff considerations and procedures for soft handoffs, as claimed by Applicants, and hard handoffs, as disclosed by the Raith reference, are radically different and independent. (Raith, p. 4, lines 1-4).

Clearly, the Raith reference discloses use of location data for performing hard handoffs, however, the Raith reference does not describe, either expressly or inherently, Applicants’ identical inventions in as complete detail as are contained in the claims. Specifically, the Raith reference does not describe in as complete detail “a *transmitter unit configured to transmit* a set of optimum system-access *parameters determined based on a current position of a mobile unit*; and a *controller configured to effectuate a soft handoff* of the mobile unit *based on the* set of optimum system-access *parameters*”, as claimed by Applicants in independent claim 14. Therefore, the Raith reference **cannot** anticipate, under 35 U.S.C. §102, Applicants’ invention as presently claimed.

Therefore, independent claim 14 is not anticipated by the Raith reference under 35 U.S.C. § 102. Accordingly, such claim is allowable over the cited prior art and Applicants respectfully request that such rejection be withdrawn.

Claims 15-19

Applicants submit that the Raith reference does not and cannot anticipate under 35 U.S.C. § 102 the presently claimed invention of independent claim 15 and claims 16-19 depending therefrom because the Raith reference does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claims.

The Office Action alleges:

Regarding claim 15, Raith discloses a base station comprising: a transmitter unit in (12, fig. 1) configured to transmit to the mobile unit (20, fig. 1) a set of optimum soft-handoff parameters determined based on a current position of the mobile unit in first coverage area (fig. 1) and a controller in (12, fig. 2) configured to effectuate a soft handoff from the first coverage area to a second coverage area based on the set of optimum soft-handoff parameters (page 7 lines 19-24; page 3 lines 3-20; page 8, lines 2-4, lines 14-15; page 9 lines 1-21). (Office Action, p. 3).

Applicants respectfully disagree that the Raith reference anticipates Applicants' invention as claimed in independent claim 15 which reads:

15. A base station comprising:
 - a ***transmitter unit configured to transmit*** to the mobile unit a set of optimum ***soft-handoff parameters determined based on a current position of the mobile unit*** in a first coverage area; and
 - a ***controller configured to effectuate a soft handoff*** from the first coverage area to a second coverage area ***based on the*** set of optimum ***soft-handoff parameters***. (Emphasis added.)

Applicants herein sustain the above-proffered arguments relating to the specific disclosure of the Raith reference. As stated above and in contrast to Applicants' invention as claimed, the Raith reference discloses a handoff technique commonly referred to as a "hard handoff". Such a handoff technique is in distinct contradiction to a "soft handoff" technique, as claimed by Applicants.

While the Raith reference discloses "if the mobile communication network was provided with the location of the mobile terminal, the mobile communication network could use this information for a variety of purposes, such as to optimize handovers", the handoff considerations and procedures for soft handoffs, as claimed by Applicants, and hard handoffs, as disclosed by the Raith reference, are radically different and independent. (Raith, p. 4, lines 1-4).

Clearly, the Raith reference discloses use of location data for performing hard handoffs, however, the Raith reference does not describe, either expressly or inherently, Applicants' identical inventions in as complete detail as are contained in the claims. Specifically, the Raith reference does not describe in as complete detail "a ***transmitter unit configured to transmit*** to the mobile unit a set of optimum ***soft-handoff parameters determined based on a current position of the mobile unit*** in a first coverage area; and a ***controller configured to effectuate a soft handoff*** from the first coverage area to a second coverage area ***based on the*** set of optimum ***soft-handoff parameters***", as claimed by Applicants in independent claim 15 from which claims 16-19 depend. Therefore, the Raith reference **cannot** anticipate, under 35 U.S.C. §102, Applicants' invention as presently claimed.

Therefore, independent claim 15 and claims 16-19 depending therefrom are not anticipated by the Raith reference under 35 U.S.C. § 102. Accordingly, such claims are allowable over the cited prior art and Applicants respectfully request that such rejections be withdrawn.

Claim 23

Applicants submit that the Raith reference does not and cannot anticipate under 35 U.S.C. § 102 the presently claimed invention of independent claim 23 because the Raith reference does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claim.

The Office Action alleges:

Regarding claim 23, Raith discloses a method for effecting soft handoff, comprising: determining a set of optimum parameters based on the current position of the mobile unit (20, fig. 1), and effectuating a soft handoff from the first coverage area to a second coverage area (see fig. 1) using a set of optimum parameters (page 3, line 7-page 4, line 4; figs 1-2). (Office Action, pp. 3-4).

Applicants respectfully disagree that the Raith reference anticipates Applicants' invention as claimed in independent claim 23 which reads:

23. A method for effectuating soft handoff, comprising:
determining a current position of a mobile unit in a first coverage area;
determining a set of optimum ***parameters based on the current position of the mobile unit***; and
effectuating a soft handoff from the first coverage area to a second coverage area ***using the*** set of optimum ***parameters***. (Emphasis added.)

Applicants herein sustain the above-proffered arguments relating to the specific disclosure of the Raith reference. As stated above and in contrast to Applicants' invention as claimed, the Raith reference discloses a handoff technique commonly referred to as a "hard handoff". Such a handoff technique is in distinct contradiction to a "soft handoff" technique, as claimed by Applicants.

While the Raith reference discloses "if the mobile communication network was provided with the location of the mobile terminal, the mobile communication network could use this information for a variety of purposes, such as to optimize handovers", the handoff considerations and procedures for soft handoffs, as claimed by Applicants, and hard handoffs, as disclosed by the Raith reference, are radically different and independent. (Raith, p. 4, lines 1-4).

Clearly, the Raith reference discloses use of location data for performing hard handoffs, however, the Raith reference does not describe, either expressly or inherently, Applicants'

identical inventions in as complete detail as are contained in the claims. Specifically, the Raith reference does not describe in as complete detail “***determining*** a set of optimum ***parameters based on the current position of the mobile unit***; and ***effectuating a soft handoff*** from the first coverage area to a second coverage area ***using the*** set of optimum ***parameters***”, as claimed by Applicants in independent claim 23. Therefore, the Raith reference **cannot** anticipate, under 35 U.S.C. §102, Applicants’ invention as presently claimed.

Therefore, independent claim 23 is not anticipated by the Raith reference under 35 U.S.C. § 102. Accordingly, such claim is allowable over the cited prior art and Applicants respectfully request that such rejection be withdrawn.

Claims 32, 35, 36

Applicants submit that the Raith reference does not and cannot anticipate under 35 U.S.C. § 102 the presently claimed invention of independent claims 32, 35 and 36 because the Raith reference does not describe, either expressly or inherently, the identical inventions in as complete detail as are contained in the claims.

The Office Action alleges:

Regarding claims 32, 35, 36, Raith discloses a computer readable medium embodying a method for effectuating soft handoff, the method comprising: determining optimum parameters based on the current position of the mobile unit (20, fig. 1), and effectuating a soft handoff from the first coverage area to a second coverage area using the set of optimum parameters (page 3, line 7-page 4, line 4; figs 1-2), a memory unit in (26, fig. 2) and a digital signal processing (DSP) unit communicatively coupled to the memory unit, the DSP (reads on GPS 50, fig. 2) being capable of determining a current position of mobile unit in a first coverage area (page 9 lines 1-8). (Office Action, p. 4).

Applicants respectfully disagree that the Raith reference anticipates Applicants’ invention as claimed in independent claims 32, 35 and 36 which read:

32. A computer readable medium embodying a method for effectuating soft handoff, the method comprising: determining a current position of a mobile unit in a first coverage area; ***determining*** a set of optimum ***parameters based on the current position of the mobile unit***; and ***effectuating a soft handoff*** from the first coverage area to a second coverage area ***using the*** set of optimum ***parameters***. (Emphasis added.)

35. An apparatus for effectuating soft handoff, comprising: means for determining a current position of a mobile unit in a first coverage area; means for *determining* a set of optimum *parameters based on the current position of the mobile unit*; and means for *effectuating a soft handoff* from the first coverage area to a second coverage area *using the* set of optimum *parameters*. (Emphasis added.)

36. An apparatus for effectuating soft handoff, comprising: a memory unit; and a digital signal processing (DSP) unit communicatively coupled to the memory unit, the DSP being capable of: determining a current position of a mobile unit in a first coverage area; *determining* a set of optimum *parameters based on the current position of the mobile unit*; and *effectuating a soft handoff* from the first coverage area to a second coverage area *using the* set of optimum *parameters*. (Emphasis added.)

Applicants herein sustain the above-proffered arguments relating to the specific disclosure of the Raith reference. As stated above and in contrast to Applicants' invention as claimed, the Raith reference discloses a handoff technique commonly referred to as a "hard handoff". Such a handoff technique is in distinct contradiction to a "soft handoff" technique, as claimed by Applicants.

While the Raith reference discloses "if the mobile communication network was provided with the location of the mobile terminal, the mobile communication network could use this information for a variety of purposes, such as to optimize handovers", the handoff considerations and procedures for soft handoffs, as claimed by Applicants, and hard handoffs, as disclosed by the Raith reference, are radically different and independent. (Raith, p. 4, lines 1-4).

Clearly, the Raith reference discloses use of location data for performing hard handoffs, however, the Raith reference does not describe, either expressly or inherently, Applicants' identical inventions in as complete detail as are contained in the claims. Specifically, the Raith reference does not describe in as complete detail "[] *determining* a set of optimum *parameters based on the current position of the mobile unit*, and [] *effectuating a soft handoff* from the first coverage area to a second coverage area *using the* set of optimum *parameters*", as claimed by Applicants in independent claims 32, 35 and 36. Therefore, the Raith reference **cannot** anticipate, under 35 U.S.C. §102, Applicants' invention as presently claimed.

Therefore, independent claims 32, 35 and 36 are not anticipated by the Raith reference under 35 U.S.C. § 102. Accordingly, such claims are allowable over the cited prior art and Applicants respectfully request that such rejections be withdrawn.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on PCT Patent Publication No. WO 01/63960 to Raith in View of U.S. Patent No. 6,594,243 to Huang et al.

Claims 4-6, 12, 13, 19-22, and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Raith (PCT Patent Publication No. WO 01/63960) in view of Huang et al. (U.S. Patent No. 6,594,243). Applicants respectfully traverse this rejection, as hereinafter set forth.

The nonobviousness of independent claim 1 precludes a rejection of claims 4-6 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, the Applicants request that the Examiner withdraw the 35 U.S.C. § 103 rejection to claims 4-6 depending from nonobvious independent claim 1.

The nonobviousness of independent claim 8 precludes a rejection of claims 12-13 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, the Applicants request that the Examiner withdraw the 35 U.S.C. § 103 rejection to claims 12-13 depending from nonobvious independent claim 8.

The nonobviousness of independent claim 15 precludes a rejection of claims 19-22 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, the Applicants request that the Examiner withdraw the 35 U.S.C. § 103 rejection to claims 19-22 depending from nonobvious independent claim 15.

The nonobviousness of independent claim 23 precludes a rejection of claim 24 which depends therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, the Applicants request that the Examiner withdraw the 35 U.S.C. § 103 rejection to claims 24 depending from nonobvious independent claim 23.

CONCLUSION

Claims 1-24, 32, 35 and 36 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,

Dated: November 16, 2006

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